

1        1. In a system including a legacy system producing clinical data for storage in  
2 a data repository, the clinical data having a format specific to the legacy system, a method  
3 for matching the clinical data to a standard of the clinical data before storing the clinical  
4 data in the data repository, the method comprising:

5                an act of receiving the clinical data from the legacy system at a health data  
6 dictionary;

7                an act of translating the clinical data by the health data dictionary such that  
8 the clinical data has a new format that is compatible with the standard;

9                an act of comparing the new format of the clinical data with the standard of  
10 the clinical data; and

11                when a match is found between the new format of the clinical data and the  
12 standard of the clinical data, an act of identifying one or more concept identifiers  
13 for the clinical data.

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15        2. A method as defined in claim 1, wherein the act of receiving the clinical  
16 data further comprises an act of receiving the clinical data through an interface engine,  
17 wherein the interface engine provides an interface code.

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19        3. A method as defined in claim 2, wherein the act of translating the clinical  
20 data further comprises an act of accessing the health data dictionary using the interface  
21 code.

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23        4. A method as defined in claim 1, wherein the act of translating the clinical  
24 data further comprises an act of identifying attributes of the clinical data.

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2       5.     A method as defined in claim 4, wherein the act of identifying attributes  
3 further comprises an act of parsing the clinical data.

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5       6.     A method as defined in claim 4, further comprising an act of identifying  
6 attributes from the clinical data, wherein the attributes correspond to attributes of the  
7 standard.

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9       7.     A method as defined in claim 4, further comprising an act of using synonym  
10 tables to identify the attributes of the clinical data, wherein the synonym tables list  
11 equivalent expressions of the attributes.

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13       8.     A method as defined in claim 4, further comprising an act of using  
14 relationship tables to define the clinical data.

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16       9.     A method as defined in claim 1, further comprising an act of storing the  
17 standard format of the clinical data in the data repository, wherein the one or more concept  
18 identifiers are stored with the clinical data.

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20       10.    A method as defined in claim 9, further comprising an act of retrieving the  
21 clinical data from the data repository.

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1           11. A method as defined in claim 1, wherein the clinical data is laboratory  
2 results and wherein the standard format is Logical Observation Identifier Names and  
3 Codes.

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5           12. A computer program product having computer executable instructions for  
6 performing the acts recited in claim 1.

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1       13. In a system including a legacy system providing clinical data including  
2 laboratory results to be stored in a data repository, wherein the laboratory results are in a  
3 format specific to the legacy system, a method for matching the clinical data including the  
4 laboratory results to a health data dictionary, the method comprising:

5               an act of loading standard laboratory results into the health data dictionary,  
6 wherein each standard laboratory result is associated with a unique concept  
7 identifier;

8               an act of creating standard relationship sets for each unique standard  
9 laboratory result, wherein the relationship sets establish relationships for attributes  
10 of each unique standard laboratory result;

11               an act of creating synonym tables for the attributes of the unique standard  
12 laboratory results;

13               an act of receiving the laboratory results at the health data dictionary;

14               an act of deriving attributes from the laboratory results using the synonym  
15 tables;

16               an act of generating a legacy relationship set for the laboratory results from  
17 the derived attributes; and

18               comparing the legacy relationship set with the standard relationship sets.

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20       14. A method as defined in claim 13, wherein the standard relationship sets  
21 identify attributes of each unique standard laboratory result.

1        15. A method as defined in claim 13, further comprising an act of determining  
2 if a new standard laboratory result should be added to the health data dictionary if an exact  
3 match is not found with the legacy laboratory result.

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5        16. A method as defined in claim 13, further comprising an act of comparing  
6 respective attributes of the legacy relationship table with the standard relationship tables.

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8        17. A method as defined in claim 13, further comprising an act of preventing  
9 matching inconsistencies using rules.

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11        18. A method as defined in claim 17, wherein the rules includes at least one of:  
12 frequency mapping; and suggesting a most likely match.

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14        19. A method as defined in claim 13, wherein the attributes include a  
15 component attribute, a property attribute, a time attribute, a system attribute, a scale  
16 attribute, and a method attribute.

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18        20. A method as defined in claim 13, further comprising an act of storing a  
19 matched laboratory result in the data repository, wherein the match laboratory result is  
20 normalized.

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22        21. A method as defined in claim 13, further comprising an act of manually  
23 matching laboratory results that do not match the standard laboratory results.

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1           22. A computer program product having computer executable instructions for  
2 performing the acts recited in claim 12.  
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1        23. In a system including a legacy transmitting legacy clinical information to a  
2 health data dictionary, a method for translating the clinical information to match a standard  
3 clinical information, the method comprising:

4                a step for creating standard sets of relationships for the standard clinical  
5 information in the health data dictionary;

6                a step for deriving legacy sets of relationships for the legacy clinical  
7 information; and

8                a step for comparing the legacy sets of relationships with the standard sets  
9 of relationships to identify an exact match for the legacy clinical information.

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11        24. A method as defined in claim 23, wherein the step for creating standard sets  
12 of relationship further comprises a step for creating unique identifiers for each different  
13 code in the standard clinical information.

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15        25. A method as defined in claim 24, wherein the step for creating standard sets  
16 of relationships further comprises:

17                a step for creating code relationship tables for each code, wherein the code  
18 relationship tables identify attributes of the standard clinical data; and

19                a step for creating attribute relationship tables for each code, wherein the  
20 attribute relationship tables identify independent values of the attributes of the  
21 standard clinical data.

1        26. A method as defined in claim 25, wherein the step of deriving legacy sets of  
2 relationships further comprises a step for identifying independent values of the attributes  
3 using synonym tables, wherein the synonym tables contain synonyms for independent  
4 values.

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6        27. A method as defined in claim 26, further comprising a step for entering the  
7 derived attributes in the legacy sets of relationships.

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9        28. A method as defined in claim 23, further comprising a step for adding a new  
10 standard sets of relationships for legacy sets of relationships that do not match standard  
11 sets of relationships.

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13        29. A method as defined in claim 23, further comprising a step for suggesting a  
14 match when the legacy sets of relationships partially match the standard sets of  
15 relationships.

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17        30. A method as defined in claim 23, wherein the standard sets of relationships  
18 comply with Logical Observation Identifier Names and Codes.

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20        31. A computer program product having computer executable instructions for  
21 performing the steps recited in claim 23.